CLAIMS

We claim:

1. A DNA compound that comprises an isolated DNA sequence encoding SEQ ID NO: 2.

2. The DNA compound of Claim 1 which comprises the isolated DNA sequence which is SEQ ID NO: 1.

3. A vector comprising an isolated DNA sequence of Claim 1.

4. A vector comprising an isolated DNA sequence of Claim 2.

5. A method for constructing a transformed host cell capable of expressing SEQ ID NO: 2, said method comprising transforming a host cell with a recombinant DNA vector that comprises an isolated DNA sequence of Claim 1.

6. A method for expressing SEQ ID NO: 2 in a transformed host cell said method comprising culturing said transformed host cell of Claim 5 under conditions suitable for gene expression.

7. An isolated DNA molecule of Claim 1 or a portion thereof, which is labeled with a detectable moiety.

8. A host cell containing the vector of Claim 3.

9. A host cell containing the vector of Claim 4.

10. A method for determining the fungal MDR inhibition activity of a compound which comprises:

a) placing a culture of fungal cells, transformed with a vector capable of expressing atrD, in the presence of:

(i) an antifungal agent to which said fungal cell is resistant, but to which said fungal cell is sensitive in its untransformed state;

(ii) a compound suspected of possessing *Aspergillus nidulans* MDR inhibition activity; and

b) determining the fungal MDR inhibition activity of said compound by measuring the ability of the antifungal agent to inhibit the growth of said fungal cell.

11. A method of Claim 10 wherein the fungal cell is *Saccharomyces cerevisiae*.

12. The protein of SEQ ID No. 2 in purified form.

13. A strain of *A. nidulans* wherein said strain carries a gene disruption or gene replacement at the atrD locus such that said strain does not produce the atrD protein product.

14. A method for identifying an antifungal compound comprising the steps of:

a. culturing in the presence of a test compound a strain of claim 13;

b. culturing said strain in the absence of said test compound; and

c. comparing the growth of said strain in step (a) with the growth in step (b).